



Features and Benefits:

- Ⓢ Side entry, small footprint to minimize board space
- Ⓢ UL62368-1 compliance file No. E216117
- Ⓢ Meets IEEE 802.3 specification for 1G, 2.5G and 5G
- Ⓢ Industrial operating temperature -40 to +85°C
- Ⓢ Options supporting 90W Power over Ethernet
- Ⓢ Through-hole Reflow (THR) compatible processing

Electrical Specifications @ 25°C - Operating Temperature -40°C to 85°C

Part Number	Data Rate	LED Colour (L/R)	Supported PoE Current	EMI Choke Fitted	EMI Fingers	Isolation** (Pri:Sec)
JXFO-1010NL	1000Base-T	None	No	2W Signal Line	Top & Sides	2250VDC / 60sec
JXFO-1011NL	1000Base-T	Green-Yellow / Green-Yellow	No	2W Signal Line	Top & Sides	2250VDC / 60sec
JXFO-1012NL	1000Base-T	Green-Yellow / Green-Yellow	900mA - 90W 4 Pair	3W, PHY side	Top & Sides	2250VDC / 60sec
JXFO-2510NL	2.5GBase-T	None	No	2W Signal Line	Top & Sides	2250VDC / 60sec
JXFO-2511NL	2.5GBase-T	Green-Yellow / Green-Yellow	No	2W Signal Line	Top & Sides	2250VDC / 60sec
JXFO-2512NL	2.5GBase-T	Green-Yellow / Green-Yellow	900mA - 90W 4 Pair	3W, PHY side	Top & Sides	2250VDC / 60sec
JXFO-5010NL	5GBase-T	None	No	2W Signal Line	Top & Sides	2250VDC / 60sec
JXFO-5011NL	5GBase-T	Green-Yellow / Green-Yellow	No	2W Signal Line	Top & Sides	2250VDC / 60sec
JXFO-5012NL	5GBase-T	Green-Yellow / Green-Yellow	900mA - 90W 4 Pair	3W, PHY side	Top & Sides	2250VDC / 60sec

* Isolation is across the Transformer only when the design supports Power over Ethernet (PoE).

Electrical Specifications @ 25°C - Operating Temperature -40°C to 85°C

Part Number	Inductance (min) Media Side	Insertion Loss (Max)	Return Loss* (dB MIN)			Cross Talk (dB TYP)		Common Mode Rejection (dB MIN)	
	100KHz, 0.1mA	1-125/250MHz	1- 40MHz	40-100MHz	100-250MHz*	10-125MHz	125-250MHz	10-125MHz	125-250/400 MHz
JXFO-1010NL	350mH	-1.5dB	-16dB	-9dB	-	-24dB	-	-24dB	-
JXFO-1011NL	350mH	-1.5dB	-16dB	-9dB	-	-24dB	-	-24dB	-
JXFO-1012NL	350mH	-1.0dB	-16dB	-9dB	-	-24dB	-	-24dB	-
JXFO-2510NL	180mH	-1.0dB	-20dB	-14dB	-10dB	-30dB	-	-35dB	-30dB
JXFO-2511NL	180mH	-1.0dB	-20dB	-14dB	-10dB	-30dB	-	-35dB	-30dB
JXFO-2512NL	180mH	-1.0dB	-20dB	-14dB	-10dB	-30dB	-	-35dB	-30dB
JXFO-5010NL	180mH	-1.0/-1.5dB	-24dB	-19dB	-14dB	-30dB	-20dB	-35dB	-30/-25dB
JXFO-5011NL	180mH	-1.0/-1.5dB	-24dB	-19dB	-14dB	-30dB	-20dB	-35dB	-30/-25dB
JXFO-5012NL	180mH	-1.0/-1.5dB	-24dB	-19dB	-14dB	-30dB	-20dB	-35dB	-30/-25dB

* Return Loss is interpolated using formula: $-20 + [15 \times \log_{10} (f/40\text{MHz})]$ for 2.5GBase-T, and $-20 + [12.5 \times \log_{10} (f/40\text{MHz})]$ for 5GBase-T.

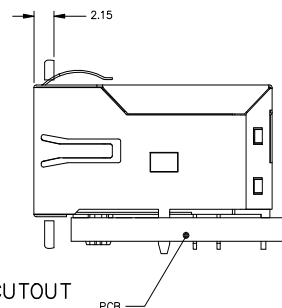
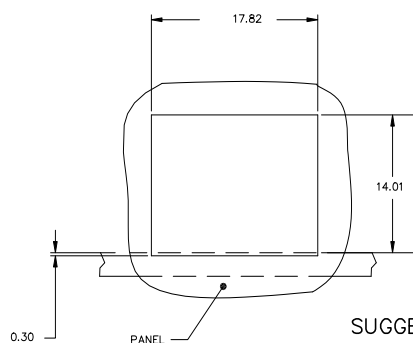
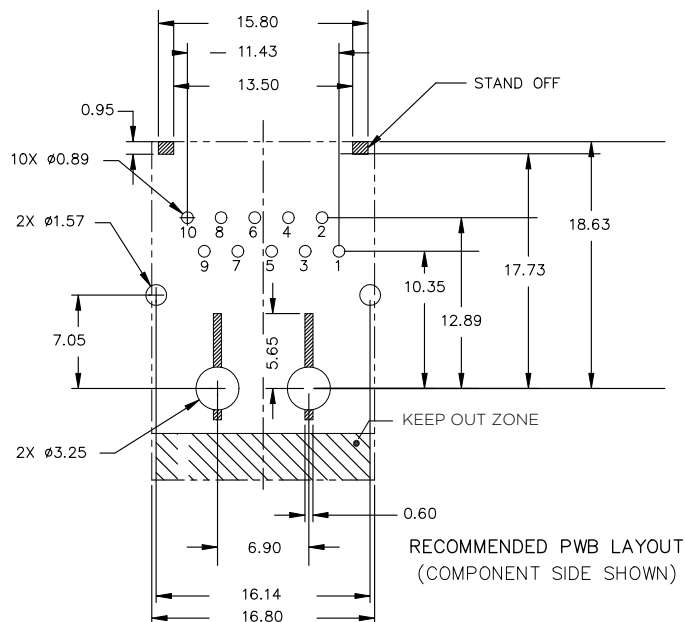
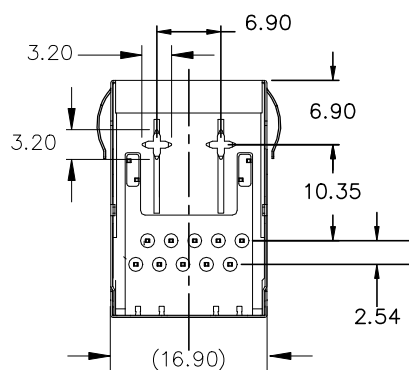
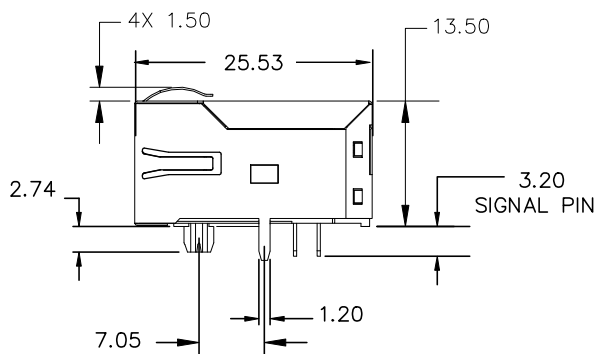
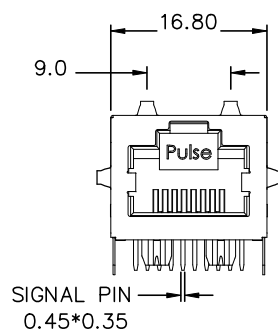
Notes:

1. ROHS Compliant:
2. Plastic housing: thermoplastic material with flammability rating UL 94V-0 or better
3. Contacts plating: 30 micro-inch gold plating.
4. Contacts base material: Phosphor bronze
5. Under plating: 30 micro-inch min nickel
6. Solder Tail Plating: 100 micro-inch (min), inches 100% tin, matte finish
7. Metal shield nickel plating on Copper Alloy
8. Jack cavity conforms to FCC part 68 subpart
9. PCB plating: HASL
10. Storage temperature: -40°C to +85°C
11. Compliance to J-STD:
 - A. J-STD-002: solderability at 245°C DIP and LOOK test
 - B. J-STD-020: level 1, no moisture sensitive
 - C. J-STD-075: R7, 260°C maximum through Wave Solder
 - D. J-STD-075: R7, 245°C maximum Reflow soldering Process
12. Parts come in full Trays of 50pcs

Mechanicals

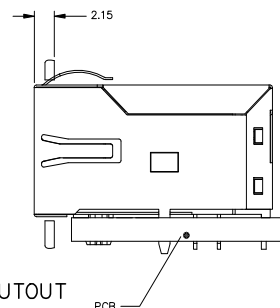
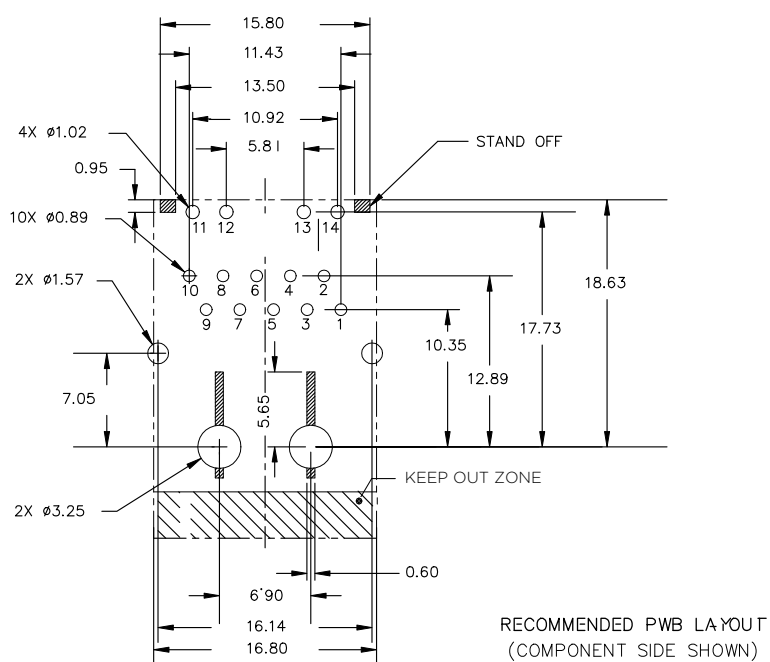
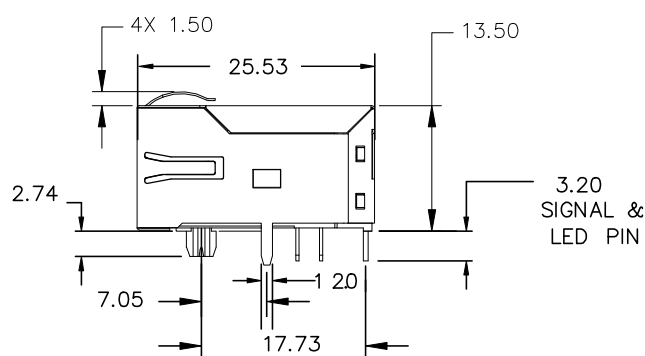
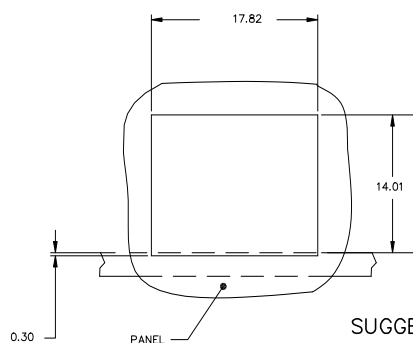
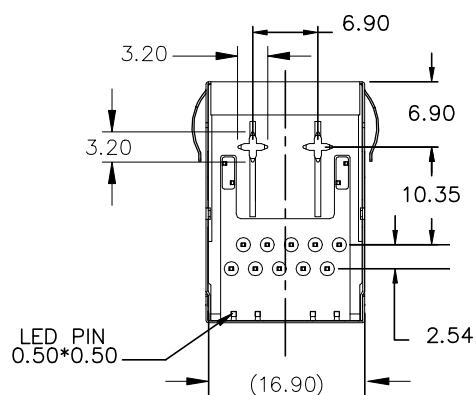
JXF0-xx10NL

Design with EMI Fingers and no LEDs



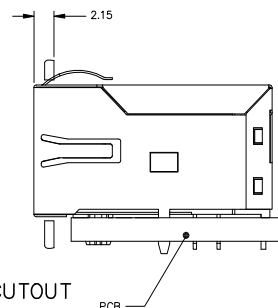
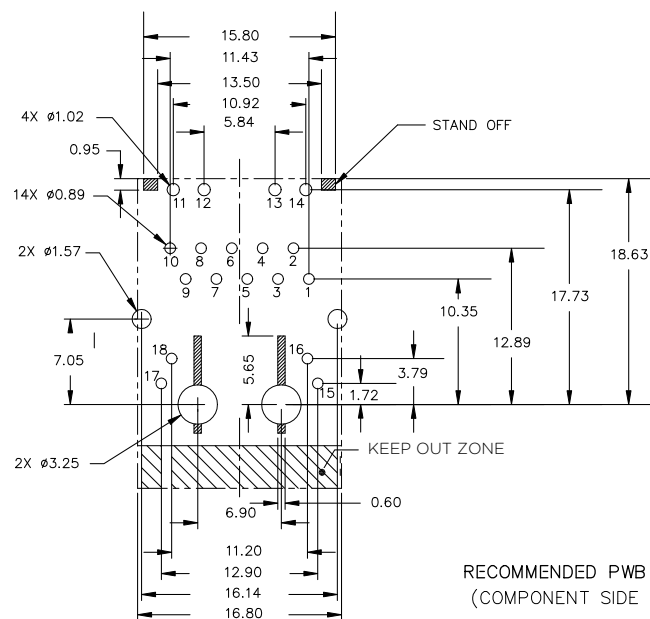
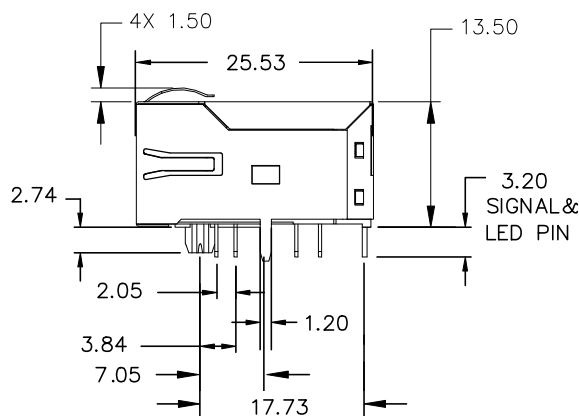
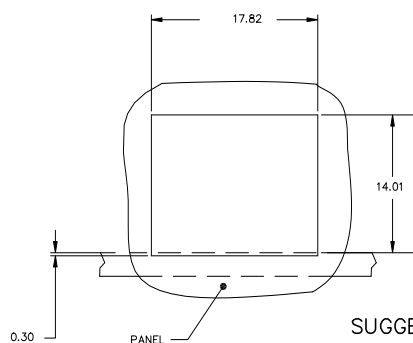
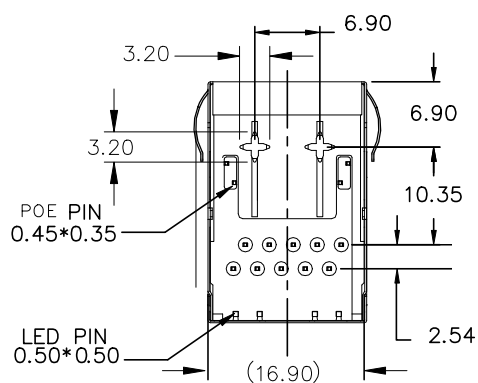
JXF0-xx11NL

Top view diagram of the Pulse module. The overall width is 16.80. The distance from the left edge to the center of the module is 9.0. The module is labeled "Pulse" in the center. The top edge has two green/yellow wires labeled "GREEN/YELLOW". The bottom edge has a row of pins labeled "SIGNAL PIN" with dimensions 0.45*0.35.



JXF0-xx12NL

Top view diagram of the Pulse module. The overall width is 16.80. The distance from the left edge to the center of the module is 9.0. The module is labeled "Pulse" in the center. The top edge has two green/yellow wires labeled "GREEN/YELLOW". The bottom edge has a signal pin labeled "SIGNAL PIN" with dimensions 0.45*0.35.

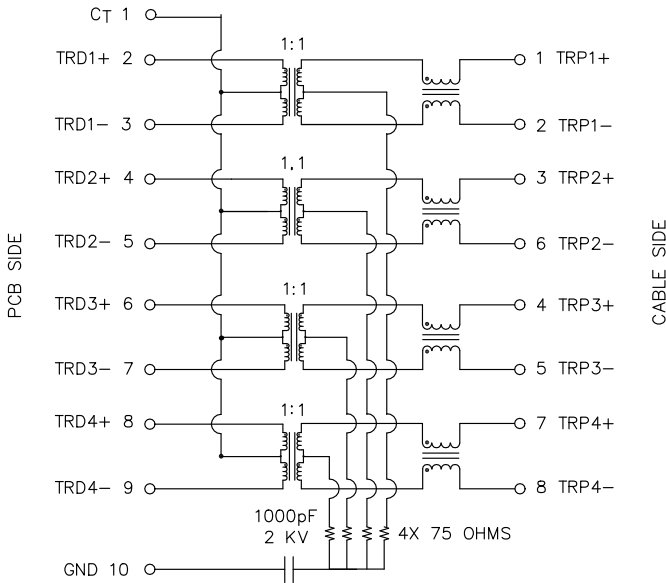


Industrial 10/100Base-TX PulseJack™ Integrated RJ45 Connector

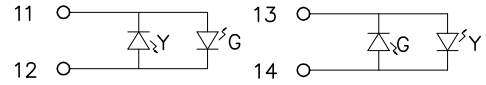
Rugged latch-Down Series designs for industrial and outdoor use

SCHEMATICS

JXFO-1010NL, JXFO-2510NL, JXFO-5010NL (without LEDs)



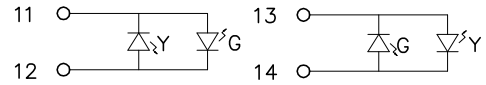
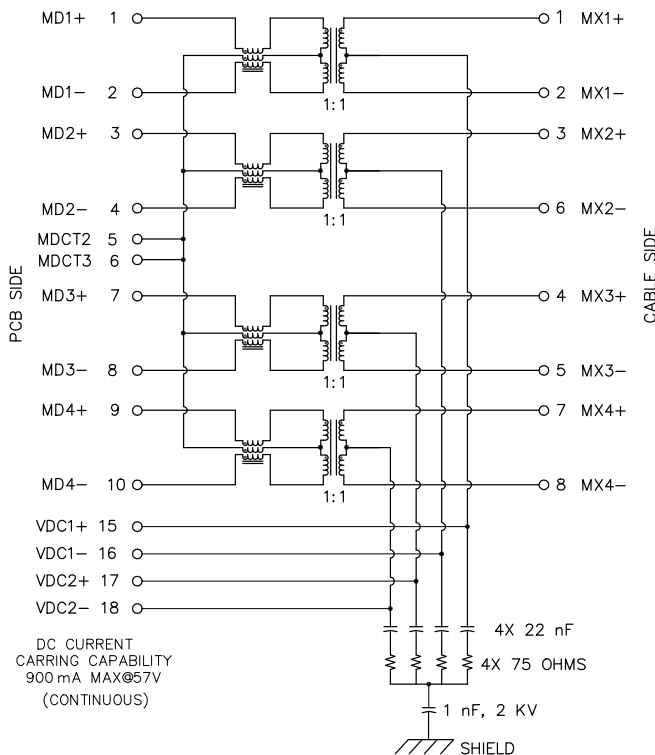
JXFO-1011NL, JXFO-2511NL, JXFO-5011NL (with LEDs)



BI-COLOUR LED SPECIFICATION

EMMITTED COLOR	GREEN	YELLOW
WAVELENGTH (nm)	568 nM	585 nM
BRIGHTNESS (mCD)	8 TO 12 TYP. @ 20mA	8 TO 12 TYP. @ 20mA
VIEWING ANGLE	100°	100°
POWER DISSIPATION (Pd)	100 mW MAX	100 mW MAX
DC FORWARD CURRENT	150 mA MAX	150 mA MAX
REVERSE VOLTAGE (Vr)	5.0 V MAX	5.0 V MAX

JXFO-1012NL, JXFO-2512NL, JXFO-5012NL



BI-COLOUR LED SPECIFICATION

EMMITTED COLOR	GREEN	YELLOW
WAVELENGTH (nm)	568 nM	585 nM
BRIGHTNESS (mCD)	8 TO 12 TYP. @ 20mA	8 TO 12 TYP. @ 20mA
VIEWING ANGLE	100°	100°
POWER DISSIPATION (Pd)	100 mW MAX	100 mW MAX
DC FORWARD CURRENT	150 mA MAX	150 mA MAX
REVERSE VOLTAGE (Vr)	5.0 V MAX	5.0 V MAX

For More Information:

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